REMARKS

Reconsideration of this application is requested. Claims 33, 34, 41, 43, 44 and 46-61 will be active in the application subsequent to entry of this amendment.

The claims have been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention and to further characterize the nature of the second nitride semiconductor layer being (1) of the n-type (2) a single layer and (3) one having a thickness in a range of 0.1 to 20 μm as disclosed in the specification on lines 15-18 of page 37. Further, the claims specify an n-type cladding layer of nitride semiconductor postioned between the third nitride semiconductor layer and the active layer.

New Claim	Old Claim
33	33+38+[second layer is a single layer (0.1~20 μm)]
34	34+38+[second layer is a single layer (0.1~20 μm)]
48	33+42+[second layer is a single layer (0.1~20 μm)]
49	34+42+[second layer is a single layer (0.1~20 μm)]
55	33+45+[second layer is a single layer (0.1~20 μm)]
56	34+45+[second layer is a single layer (0.1~20 μm)]

As defined by the claims above presented, the present invention is characterized in that an n-type second nitride semiconductor layer is sandwiched by the first and third nitride semiconductor layers of which impurity concentrations are set within 1 x $10^{17}/cm^3$ under the n-type cladding layer. With this configuration, it is possible to form an n-type cladding layer having a good crystallinity and an active layer having a good crystallinity as applicants explain at page 12 of their specification.

The issues raised in the Official Action all relate to prior art, the main reference being primarily Itaya et al '017 which is applied in items 2 and 3 of the Official Action by itself as either an anticipation or rendering obvious various claims. A third art-based rejection, item 4 of the Official Action, relies on the same primary reference in view of

Bruno '604. These three rejections are respectfully traversed having regard to the new and amended claims presented above.

Applicants claims are directed to structures distinct from and patentable over the disclosures of these two documents whether considered singly or in combination. Perhaps the easiest way to explain this is to refer to the following representation of the layers of the present invention versus those of the primary reference.

Present Invention	Fig. 12-19 (Itaya)
Active layer	Active layer
n-type Cladding layer	Undoped GaN505
Third nitride semiconductor layer	n-AlGaN504(cladding layer)
Second nitride semiconductor layer	N-GaN503(contact layer)
First nitride semiconductor layer	Undoped GaN Buffer layer

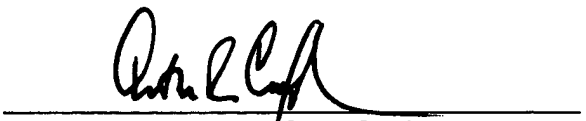
The present invention is also different from Bruno '604 and Fig. 29 of Itaya in that the second nitride semiconductor layer is not a superlattice layer.

It is believed from the above information and illustration it will be apparent that applicants' claims are neither anticipated by nor suggested in the documents cited and relied upon. Reconsideration of this application, entry of this amendment and favorable action are solicited.

Please take into account the concurrently filed Information Disclosure Statement.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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